

Abstract

The invention relates to a liquid crystal device comprising a liquid crystal bulk layer and a surface-director alignment layer comprising side-chains arranged to interact with the bulk layer, wherein the orientation of the bulk layer molecules and the orientation of said side-chains each is directly controllable by an electric field via dielectric coupling, thus resulting in a decreased total time period (rise and decay times) needed to switch and relax the liquid crystal bulk molecules in response to an applied external field. The invention also relates to a method for manufacturing a liquid crystal device and a method of controlling a liquid crystal bulk layer.